Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (original) A method for measuring blood oxygen saturation, comprising the steps of:

providing a sensor and a pulse oximeter;

selecting a light source and a light detector;

optimizing a wavelength spectrum of light received by said light detector from said light source for an oxygen saturation reading less than 80 percent;

placing said sensor on a patient; and

determining said blood oxygen saturation using said sensor and said pulse

oximeter.

2-52. (canceled)